

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P1198PC00	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2004/006843		
Applicant EPIGENOMICS AG	International filing date (day/month/year) 24/06/2004	(Earliest) Priority Date (day/month/year) 24/06/2003

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☒ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

international application no.
PCT/EP2004/006843

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
- a. type of material
- ☒ a sequence listing
- ☐ table(s) related to the sequence listing
- b. format of material
- ☒ in written format
- ☒ in computer readable form
- c. time of filing/furnishing
- ☐ contained in the international application as filed
- ☐ filed together with the international application in computer readable form
- ☒ furnished subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, MEDLINE, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/072880 A (EPIGENOMICS AG; OLEK, ALEXANDER; BERLIN, KURT) 19 September 2002 (2002-09-19) cited in the application	1-24
Y	page 7 - page 31; claims 1-41; figures 10-13; examples 3-10	25
X	WO 00/70090 A (UNIVERSITY OF SOUTHERN CALIFORNIA) 23 November 2000 (2000-11-23)	1,2, 6-11, 13-16
Y	page 10 - page 22; claims 1-26; figures 1-4; examples 2-4	3-5,12, 17-25
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

1 April 2005

Date of mailing of the international search report

15/04/2005

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Botz, J

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	COTTRELL SUSAN E ET AL: "A real-time PCR assay for DNA-methylation using methylation-specific blockers." NUCLEIC ACIDS RESEARCH. 2004, vol. 32, no. 1, 2004, pages E10-1-E10-8, XP002321756 ISSN: 1362-4962 the whole document	1-25
P,Y	KAWAKAMI KAZUYUKI ET AL: "The folate pool in colorectal cancers is associated with DNA hypermethylation and with a polymorphism in methylenetetrahydrofolate reductase." CLINICAL CANCER RESEARCH : AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH. 1 DEC 2003, vol. 9, no. 16 Pt 1, 1 December 2003 (2003-12-01), pages 5860-5865, XP002321757 ISSN: 1078-0432 the whole document	1-25
Y	WO 99/55905 A (COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION; CLARK, S) 4 November 1999 (1999-11-04) the whole document	1-25
Y	WO 97/46705 A (THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE) 11 December 1997 (1997-12-11) the whole document	1-25
Y	ESTELLER M ET AL: "INACTIVATION OF GLUTATHIONE S-TRANSFERASE P1 GENE BY PROMOTER HYPERMETHYLATION IN HUMAN NEOPLASIA" CANCER RESEARCH, AMERICAN ASSOCIATION FOR CANCER RESEARCH, BALTIMORE, MD, US, vol. 58, 15 October 1998 (1998-10-15), pages 4515-4518, XP000982287 ISSN: 0008-5472 the whole document	1-25
Y	DATABASE GENBANK 'Online! US NATIONAL LIBRARY OF MEDICINE (NLM), BETHESDA, MD, US; 5 December 1994 (1994-12-05), MORROW, C.S. ET AL.: "Structure of the human genomic glutath" XP002321758 Database accession no. M24485 cited in the application the whole document	1-25

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>DATABASE GENBANK 'Online! US NATIONAL LIBRARY OF MEDICINE (NLM), BETHESDA, MD, US; 24 June 2003 (2003-06-24), RIEDER,M.J. ET AL.: "Homo sapiens glutathione S-transferase pi (GSTP1) gene, complete cds." XP002321759 Database accession no. AY324387 cited in the application abstract</p> <p>-----</p>	1-25

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
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			DE	10158283 A1	28-05-2003
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			US	6017704 A	25-01-2000
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			IL	127342 A	25-07-2002
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			JP	2000511776 T	12-09-2000
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